

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A method for obtaining a recombinant plant of the *Cichorium* type, having tuberous roots, comprising the steps of:

a) performing a cross-breeding between a batch of female plants of a variety of the *Cichorium intybus* L species having tuberous roots and a batch of male plants of a variety of the *Cichorium endivia* L species and obtaining a F1 generation hybrid plant population resulting from said cross-breeding;

b) performing a self-fertilization of F1 generation hybrid plants resulting from step a) and obtaining F2 generation recombinant plants derived from said cross-breeding;

c) selecting F2 generation recombinant plants, wherein the buds or the roots thereof do not have any visible alterations caused by a viral, bacterial or fungal infection;

d) forcing F2 generation recombinant plants selected in step c) for 10 to 18 days under the following forcing conditions:

- nutriment solution temperature: 15°C to 17°C;
- room temperature: 15 to 17°C;

e) cloning F2 plants obtained at the end of step d) and obtaining regenerated buds;

f) transplanting regenerated buds on an appropriate culture medium until recombinant plants having tuberous roots are obtained.

2. (currently amended) The method according to claim 1, wherein the forcing step d) is followed by a step d1),
and

wherein step d1) consists of selecting the resulting F2 plants ~~are selected~~, before the cloning step e), according to the three following phenotype classes:

(i) PPI, wherein the plants comprise: ~~very numerous narrow leaves on a plate shaped root neck~~

more than 100 leaves per root at the completion of the forcing,

no secondary axis,

a very narrow basis for each leaf such that the ratio width of the leaf basis/height of the leaf ranges from 0.06 to 0.10,

limbs with deep indentations such that the ratio depth of the indentation/length of the indentation tip to the leaf axis ranges from 0.60 to 0.85,

indentation edges that comprise or not secondary serrations,

white or red nervures, and

a yellow or red limb,

(ii) GPI, wherein the plants comprise: ~~typology similar~~
to the endive, but with a narrow and indented leaf

from 20 to 35 leaves obtained per root at the
completion of the forcing,

no secondary axis,

deep indentations of the limb up to the leaf basis
such that the ratio depth of the indentation/length of the
indentation tip to the leaf axis ranging from 0.60 to 0.85,

indentations having an edges that comprise or not
secondary serrations,

white or red nervures, and

a yellow or red limb, and

(iii) TFR and SCA, wherein the plants comprise: ~~very~~
dentate branched leaves

from 20 to 35 leaves obtained per root at the
completion of the forcing,

2 to 5 axes secondary to the main axis occurring in the
basal half of the leaf,

deep indentations of the limb such that the ratio depth
of the indentation/length of the indentation tip to the leaf axis
ranging from 0.60 to 0.85,

indentations having edges that comprise or not
secondary serrations,

white or red nervures, and

a yellow or red limb.

3. (previously presented) The method according to claim 1, further comprising the steps of:

g) cultivating in the ground small recombinant plants obtained at the end of step f);

h) self-fertilizing F2 recombinant plants as obtained in step g) and obtaining F3 generation recombinant plants through cultivating in the ground.

4. (previously presented) The method according to claim 3, wherein the F3 generation recombinant plants obtained in step h) are subjected to a forcing step i) for a period of 10 to 18 days, under the following forcing conditions:

- nutriment solution temperature: 15°C to 17°C;
- room temperature: 15 to 17°C;

5. (previously presented) The method according to claim 4, further comprising a cloning step j) of the F3 plants obtained at the end of the forcing step i).

6. (previously presented) The method according to claim 5, wherein the cloning step j) comprises cloning the fragments of leaf nervure of the F3 plants obtained at the end of the forcing step i) and regenerating F4 generation recombinant young plants.

7. (previously presented) The method according to claim 5, wherein the cloning step j) comprises cloning the end buds of the F3 plants obtained at the end of the forcing step i) and regenerating F4 generation recombinant young plants.

8. (currently amended) A recombinant plant obtained by the method according to claim 1, comprising: (i) tuberous roots and (ii) indented leaves, wherein said plant belongs to a class selected from the group consisting of

(a) PPI, wherein the plants comprise:

more than 100 leaves per root at the completion of the forcing,

no secondary axis,

a very narrow basis for each leaf such that the ratio width of the leaf basis/height of the leaf ranges from 0.06 to 0.10,

limbs with deep indentations such that the ratio depth of the indentation/length of the indentation tip to the leaf axis ranges from 0.60 to 0.85,

indentation edges that comprise or not secondary serrations,

white or red nervures, and

a yellow or red limb,

(b) GPI, wherein the plants comprise:

from 20 to 35 leaves obtained per root at the
completion of the forcing,

no secondary axis,

deep indentations of the limb up to the leaf basis
such that the ratio depth of the indentation/length of the
indentation tip to the leaf axis ranging from 0.60 to 0.85,

indentations having an edges that comprise or not
secondary serrations,

white or red nervures, and

a yellow or red limb, and

(c) TFR and SCA, wherein the plants comprise:

from 20 to 35 leaves obtained per root at the
completion of the forcing,

2 to 5 axes secondary to the main axis occurring in the
basal half of the leaf,

deep indentations of the limb such that the ratio depth
of the indentation/length of the indentation tip to the leaf axis
ranging from 0.60 to 0.85,

indentations having edges that comprise or not
secondary serrations,

white or red nervures, and

a yellow or red limb.

9. (currently amended) The recombinant plant according to claim 8, wherein said plant belongs to class PPI. ~~and has the following common phenotype characteristics:~~

~~—— more than 100 leaves per root at the completion of the forcing;~~

~~—— no secondary axis;~~

~~—— very narrow basis of each leaf;~~

~~—— ratio width of the leaf basis/height of the leaf ranging from 0.06 to 0.10;~~

~~—— deep indentations of the limb;~~

~~—— ratio depth of the indentation/length of the indentation tip to the leaf axis ranging from 0.60 to 0.85;~~

~~—— The edge of the indentations comprises or not secondary serrations;~~

~~—— The colour of the nervures is white or red;~~

~~—— The colour of the limb is yellow or red;~~

10. (currently amended) The recombinant plant according to claim 8, wherein said plant belongs to class GPI. ~~and has the following common phenotype characteristics:~~

~~—— from 20 to 35 leaves obtained per root at the completion of the forcing;~~

~~—— no secondary axis;~~

~~—— deep indentations of the limb up to the leaf basis;~~

~~ratio depth of the indentation/length of the indentation tip to the leaf axis ranging from 0.60 to 0.85;~~

~~The edge of the indentations comprises or not secondary serrations;~~

~~The colour of the nervures is white or red;~~

~~The colour of the limb is yellow or red;~~

11. (currently amended) The recombinant plant according to claim 8, wherein said plant belongs to class TFR or SCA, and has the following common phenotype characteristics:

~~from 20 to 35 leaves obtained per root at the completion of the forcing;~~

~~2 to 5 axes secondary to the main axis occurring in the basal half of the leaf;~~

~~deep indentations of the limb:~~

~~ratio depth of the indentation/length of the indentation tip to the leaf axis ranging from 0.60 to 0.85;~~

~~The edge of the indentations comprises or not secondary serrations;~~

~~The colour of the nervures is white or red;~~

~~The colour of the limb is yellow or red;~~

12. (previously presented) The method according to claim 2, further comprising the steps of:

g) cultivating in the ground small recombinant plants obtained at the end of step f);

h) self-fertilizing F2 recombinant plants as obtained in step g) and obtaining F3 generation recombinant plants through cultivating in the ground.